APRIL 2017

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THE MAGAZINE OF THE SOCIETY FOR TECHNICAL COMMUNICATION

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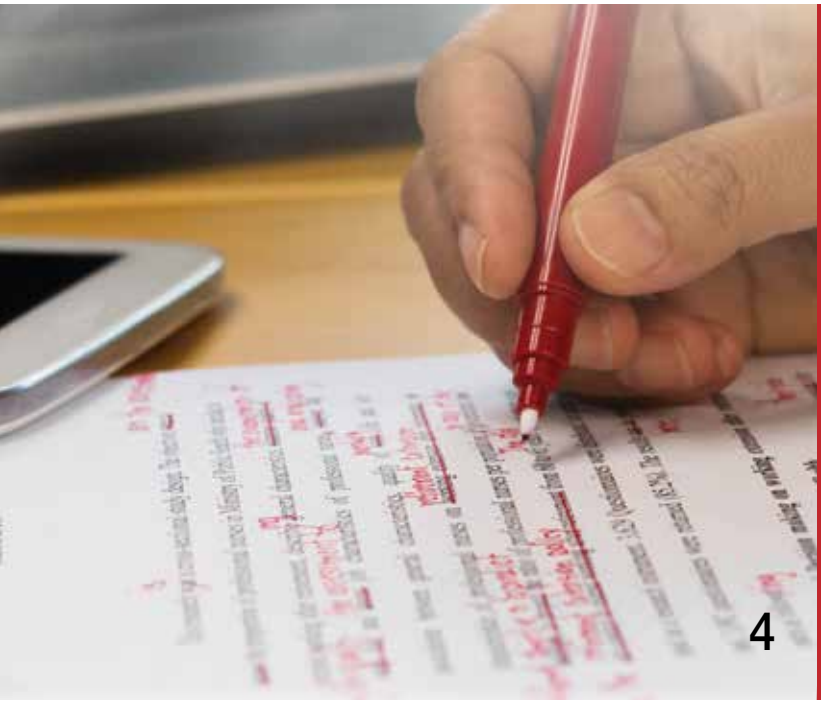

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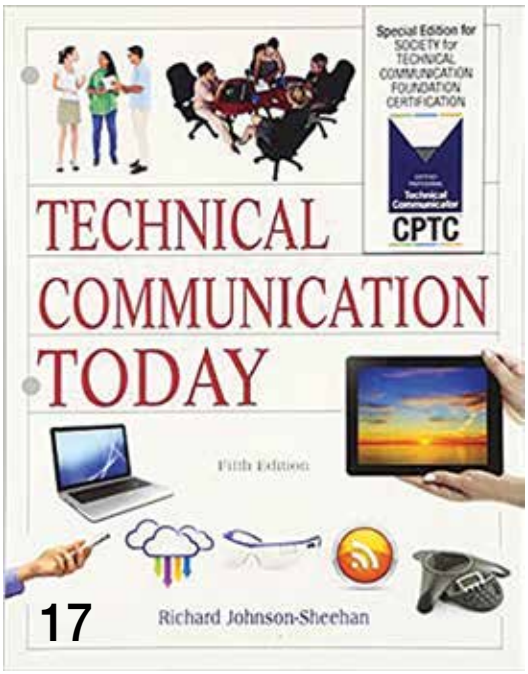

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what gives rise to that opinion
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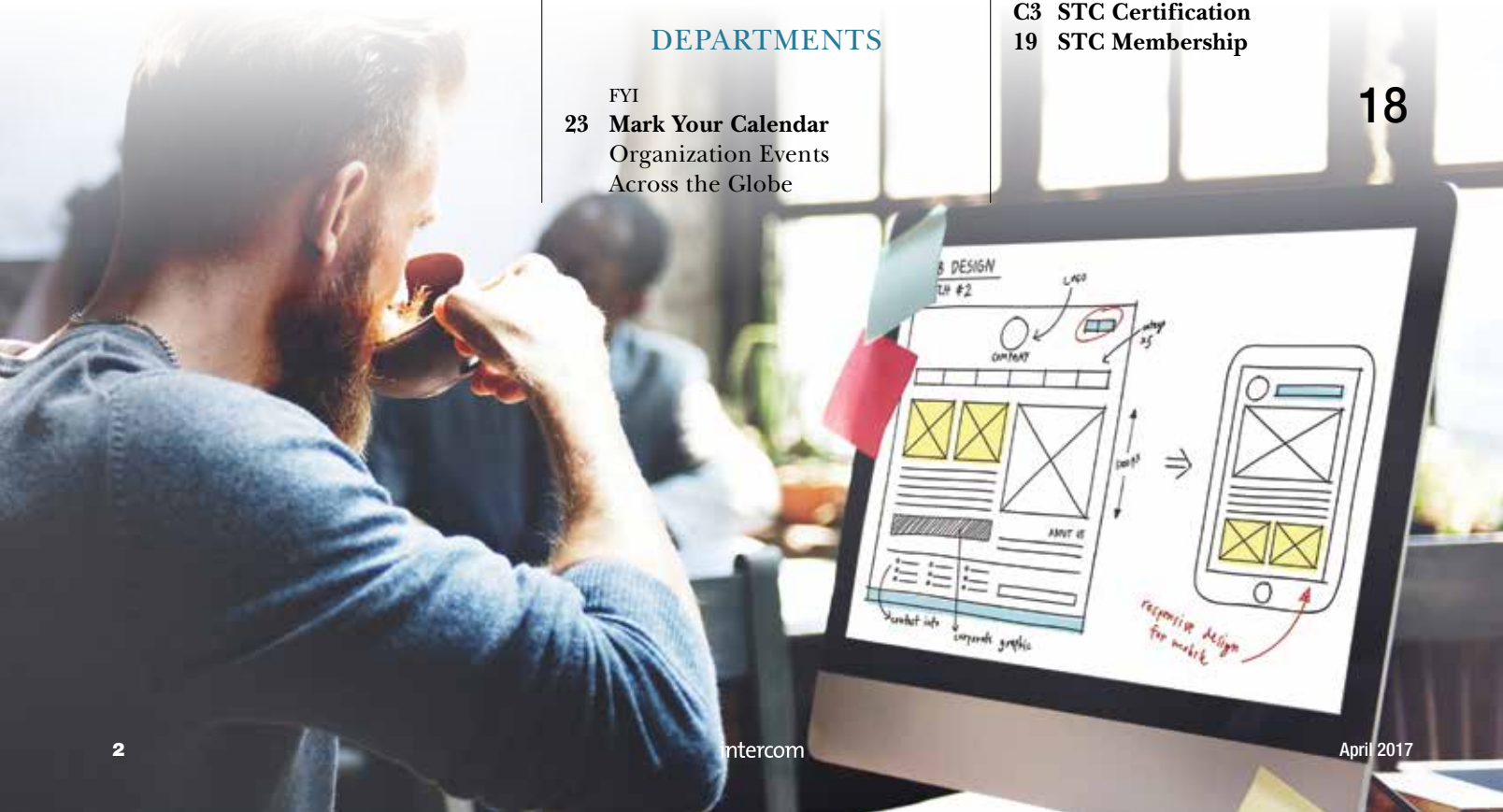

A Note from the Editor

INTERCOM VOLUME 64.4 offers a mixture of features and columns on writing and editing, tools, and career advice that show the diversity of technical communication work.

Two authors—Jessica McCaughey and Francis Bao—have written articles on improving writing when working with multilingual authors or when writing for translation. Girish Hasabnis provides techniques for technical writers to use to explain complex concepts more easily.

Do you use MacCap tools? Jayna Locke has written a personal summary of the MadWorld 2017 conference. Do you think technical communication isn't sexy? Susan Haine uses seven career personas to show how technical communication is, in fact, sexy.

Two columns published in the issue—All Access and Ethics—address 1) being part of the solution through accessibility, and 2) agency in visual risk communication. And STC Summit attendee, Elizabeth Alley, shares her Off Hours artistic skill of note-sketching. You can see more of her work on STC's Notebook blog, *https://www.stc.org/notebook/*.

Interested in writing for *Intercom*? Interested in editing *Intercom*? Visit the *Intercom* website at *https://www.stc.org/intercom/* to review submission guidelines, the editorial calendar, and the request for proposals for the next editor of the magazine.

—Liz Pohland
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intercom

Intercom, the magazine of the Society for Technical Communication, is published to provide practical examples and applications of technical communication that will promote its readers' professional development.

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Address Changes: membership@stc.org
Intercom Editorial: intercom@stc.org

Reprint Permissions: www.copyright.com
Intercom (ISSN 0164-6206) is published 10 times a year (monthly, except for August and December) by the Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031-1803, a nonprofit educational organization, as a service to its membership. Membership in STC includes a subscription to **Intercom**. Periodicals postage paid at Fairfax, VA, and additional offices.
Postmaster Send address changes to **Intercom**, Attn: Membership, c/o Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031-1803.

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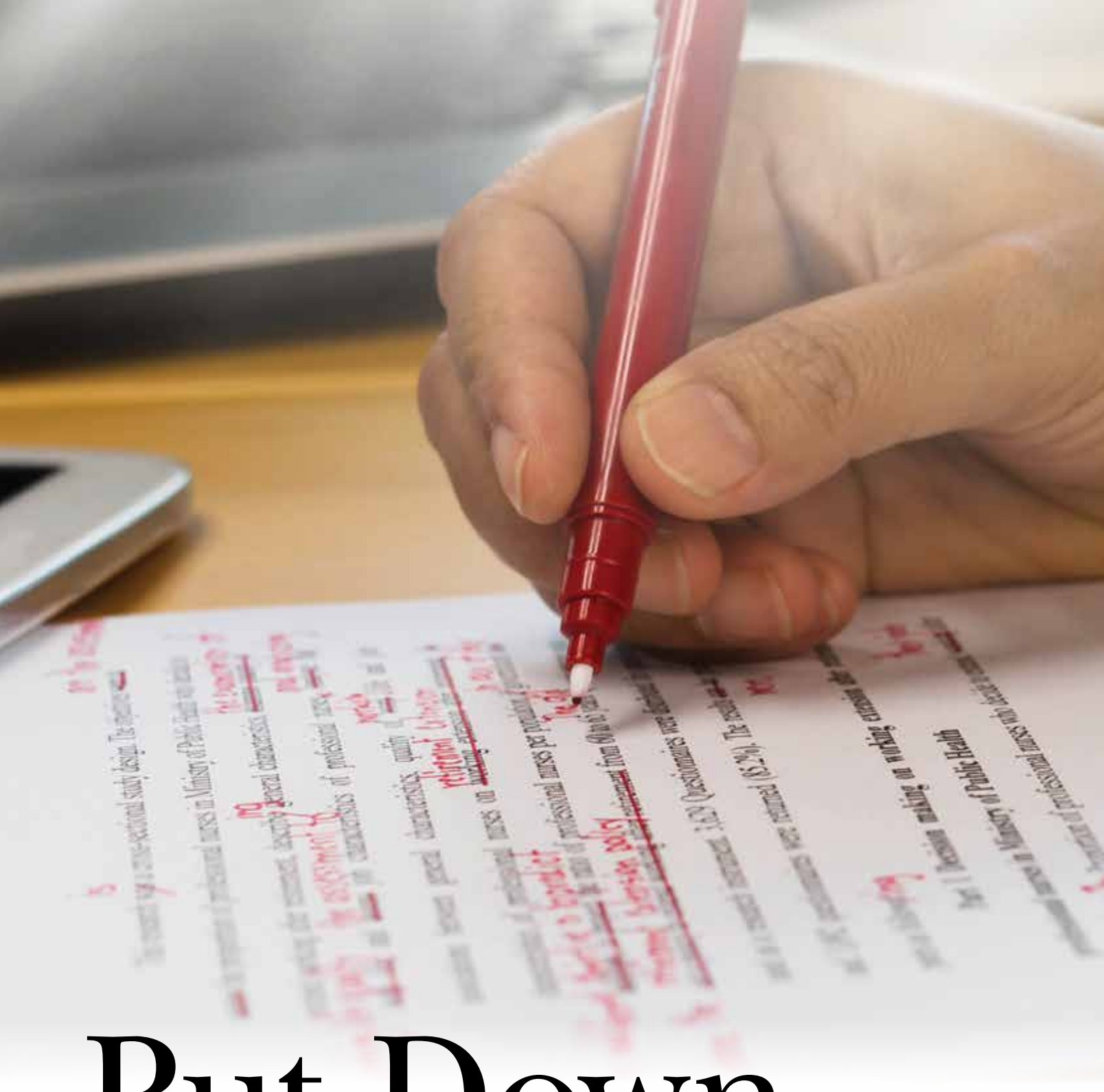

Put Down the Red Pen!

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Nine Strategies for Providing Better Feedback to Multilingual Writers

By JESSICA MCCAUGHEY

IN MANY WAYS, editors in the workplace are a lot like writing teachers. They review and provide feedback on writing. They have to be patient. They answer questions. They weild the proverbial red pen (or at least the red "track changes" bubble). And in other ways, of course, they are nothing like teachers—mostly because if a writer can't fix something, editors have to fix it for them. There's not a lot of room for "learning through failure" in the workplace, and this makes professional writing especially challenging for multilingual writers. These are often writers who need that space to practice most, yet when we edit their work—our red pens wreaking havoc across their writing, our scratching out of phrases, our question marks, and our rewrites—we are often telling them that there's no time to practice. Unfortunately, most second-language (or, more often, third- or fourth-language) English learners in the workplace receive the kinds of edits that teach them, simply put, nothing.

Time is often at the heart of any dilemma of teaching through edits—project turnaround often needs to be lightning-fast, and we are busier than ever—and yet when it comes to multilingual writers, the "spend-time-now-and-save-it-later" adage is perhaps more true than in any other editing situation. Below is a series of nine strategies that work, and concrete steps editors can take to support their multilingual writers as they develop as workplace communicators.

1. Remember that Idiosyncratic Writing Is Not Necessarily Bad Writing

We are used to hearing words in a certain way, and in a certain order. One of my favorite things about multilingual writers is that they rarely, if ever, rely upon clichés—those tired, old phrases that native speakers water down their language with all the time. Multilingual writers don't usually know those clichés, and so they find original, unique ways to say things instead. And while such phrasing isn't always successful, of course, you shouldn't give in to the inclination of crossing out phrases just because they sound unfamiliar to your ear. Your voice and style don't have to be the writer's voice and style, as long as the writing is clear and effective.

2. Ask Struggling Multilingual Writers to Build Their Own Reference Guide

It's an old teacher trick: Get the students to make the textbook. But it works. Ask your multilingual writers to develop a kind of "writer's resource guide" for themselves that they can use as both a reference and a tracker of their work and improvement. Such a guide might include:

- Resources specific to the language issues they're struggling with
- A list of common errors in checklist form they can use for proofreading
- Common go-to phrases they can and should use
- Phrases to avoid
- Models of good writing in various forms and genres
- Previously edited documents
- Goals and strategies
- Notes on style that are specific to the organization

3. Look for "Patterns of Error"

This phrase—"patterns of error"—is key in working with multilingual writers, and it takes a keen editorial eye to perform the task. While you may need to line edit every little error, you should also try to step back and begin to categorize the most common types of errors you're seeing. Are there subject-verb agreement issues? Misused prepositions? Problems with articles? The more clearly you can identify and articulate these patterns of error to your writers, the likelier it is that they'll begin to spot them in their own work—before it hits your desk.

4. Edit Everything—But Choose Just One Paragraph to Teach

Receiving back ten pages of red slashes and scribbles overwhelms even the most adept writers. And even if a writer can get through those notes and adapt the text, they're not going to learn much from them. At the same time, you don't

have time to annotate every single line edit. So, compromise: Choose one paragraph and edit it very carefully, including notes about the grammar rule or what *specifically* makes a sentence unclear or less than ideal. By choosing to focus on a small number of issues—and providing an explanation for why they're being changed—you're giving your writer a much better chance to not only understand your revisions, but also to internalize and learn from them.

5. Prioritize

After leaving thoughtfully annotated comments—either periodically or limited to one paragraph—you might consider writing an endnote to your writer about how and where to focus and learn from your edits. Guide them, in this paragraph, through your notes, and point them to the places you really want them to learn from. You can even include links and other references here to help them. Be sure to also point to those places in the text where the writer was successful and where you see improvement.

6. Provide Models of Form and Language

If you're like most editors, you probably have a folder full of exemplary documents. Why not share these with your struggling writers? Better yet, share them *and* walk through the documents, exploring *with* your multilingual writers not only the forms but also the language the samples use, and how they might emulate some of those successful strategies.

7. Have an In-person (or Online) Conversation about the Writing

A few forward-thinking CEOs around the country are making news lately by implementing all-out writing centers within their businesses, but even if your company isn't ready or able to put in those kinds of resources, you can still mimic the proven success of university writing centers by spending some time one-on-one with your multilingual writers. Some tips:

- Ask the writer to read out loud—you'll be surprised by how many more "errors" they catch
- Talk through clarity issues with the computer closed and the paper flipped over, so that writers can focus on the words they intend (and their ideas), rather than those already on the page (also, many multilingual writers are more comfortable talking than writing)
- Ask them to describe their process and where they see the text's strengths and weaknesses
- Look at models together

And if you don't have time to "tutor" your writer? Find someone with the time and interest to do it. That might be another strong writer on your team with a knack for teaching or even another multilingual writer. Often such partnerships between second-language learners work wonders, especially when each writer brings different skills to the table. Even if it's just a 30-minute in-person or online session once every couple of weeks, the consistent time spent talking through their writing (or the strong writing of others!) will go a long way in advancing a multilingual writer's skills.

8. Be Realistic about the Pace of Change

As anyone who has ever tried to learn another language—let alone write complex business documents in that language in the workplace—knows, improvement takes time. The next time you're exasperated by seeing the same error you've corrected in the past in a draft, try to imagine yourself writing a report or a proposal in German or Japanese, and know that with patience and thoughtful feedback from you, the writer's work will improve eventually.

9. Recognize that These Are the Writers Who Are Making You a Better Editor (And Thinker. And Writer.)

What's the difference between "imagine" and "consider"? What does "out of left field" mean? Why use "that" rather than "this" in a given sentence? Being able to answer questions like these—questions that inevitably come from writers working to master written English—are the kinds of challenges editors love when they have the time. Even when time is tight, remember that taking a few minutes to answer these questions for multilingual writers will not only help them to recall correct usage in the future, but it will also make *you* a better editor. They force you to think of language in ways you've never considered, and ask you to articulate nuances that often go unnoticed by native English-speaking writers.

Whether you work with teams across the globe with a variety of first languages, or one of your writers happens to be multilingual, these are the strategies and ways of thinking that will allow you to not only make your job easier and more satisfying, but also show your employees that you're willing to invest the time in them and their writing to make them stronger communicators.

JESSICA MCCAUGHEY (jessmcc@gwu.edu) *is an assistant professor at George Washington University in Washington, DC, where she teaches academic and professional writing. She also developed and oversees a professional writing program at GWU that provides workshops and coaching to writers in the workplace. In her previous life, she taught English as a Second Language and worked as a copywriter, editor, and communications manager.*

Expert Tips to Improve Content Quality When Writing for Translation

By FRANCIS BAO | *STC Associate Fellow*

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LOCALIZATION IS AN EFFECTIVE method for cross-cultural communication. It requires an ability to translate the text correctly and accurately. It all begins with preparing content for international readers and making sure that source text is easy to translate. Once the stage is set for translation, a translator will be able to focus on the translation process itself and refine content further to suit different audiences. Writing translation-ready materials will save time as well as money, and it will also increase the quality and readability of target translations.

Cultural differences as well as linguistic differences must be incorporated into the translation process. An effective translation will not let the audience sense that the text was originally written in another language. Global audiences don't always translate the way we intend; therefore, ineffective translation will change the meaning of original content and can cause confusion. Today, the way we speak and write affects others on a wide scale. Many people believe that translation is an easy thing and that all you have to do is to change words from the source text into the equivalent words of the target text. However, this is not true since some phrases or terms, if translated literally, would not make sense. Translation is a very complicated process. A critical element of successful localization is focusing on source text quality, or how well-written the content is. The source text serves as a base for translated content in all other languages. As the number of target languages for translation increases, the impact of the source content does as well. For this reason, when writing for successful translation, it is important to plan ahead and write it right the first time. Here are some useful tips to remember when writing for translation.

1. Keep Sentences Brief

Keep sentences simple and direct to increase understanding. Aim for about 20 words or less. Also use a style guide for consistency. Clear, concise, and well-constructed sentences will improve translation quality, reduce turnaround time, and cut costs, which speeds time-to-market and accelerates revenue streams.

2. Use Standard English Word Order Whenever Possible

Standard English word order generally means a subject, verb, and object with associated modifiers. Ensure that grammatical structure and proper punctuation are correctly applied in all sentences.

3. Avoid Long Noun Strings

When connecting elements are omitted from noun strings, readers must infer the relationship between the words. If people have to read a sentence several times to understand its meaning, it will cause further complications when it is translated into a different language. When this happens, we tend to see misinterpretations of the original meaning, or a translation that appears too literal.

4. Use One Word to Identify a Single Concept

Synonyms get in the way of clarity. Write the same thing, the same way, every time you write it. Finding different ways to write a single concept will not only affect the overall consistency of the translation, but it will also reduce the related translation memory leverage. This can lead to decreased quality and increased costs and turnaround. Translation memories leverage words in segments, so changing even a minor word will have an impact. Always consider reusing existing content that has already been translated.

5. Avoid Jargon in the Content

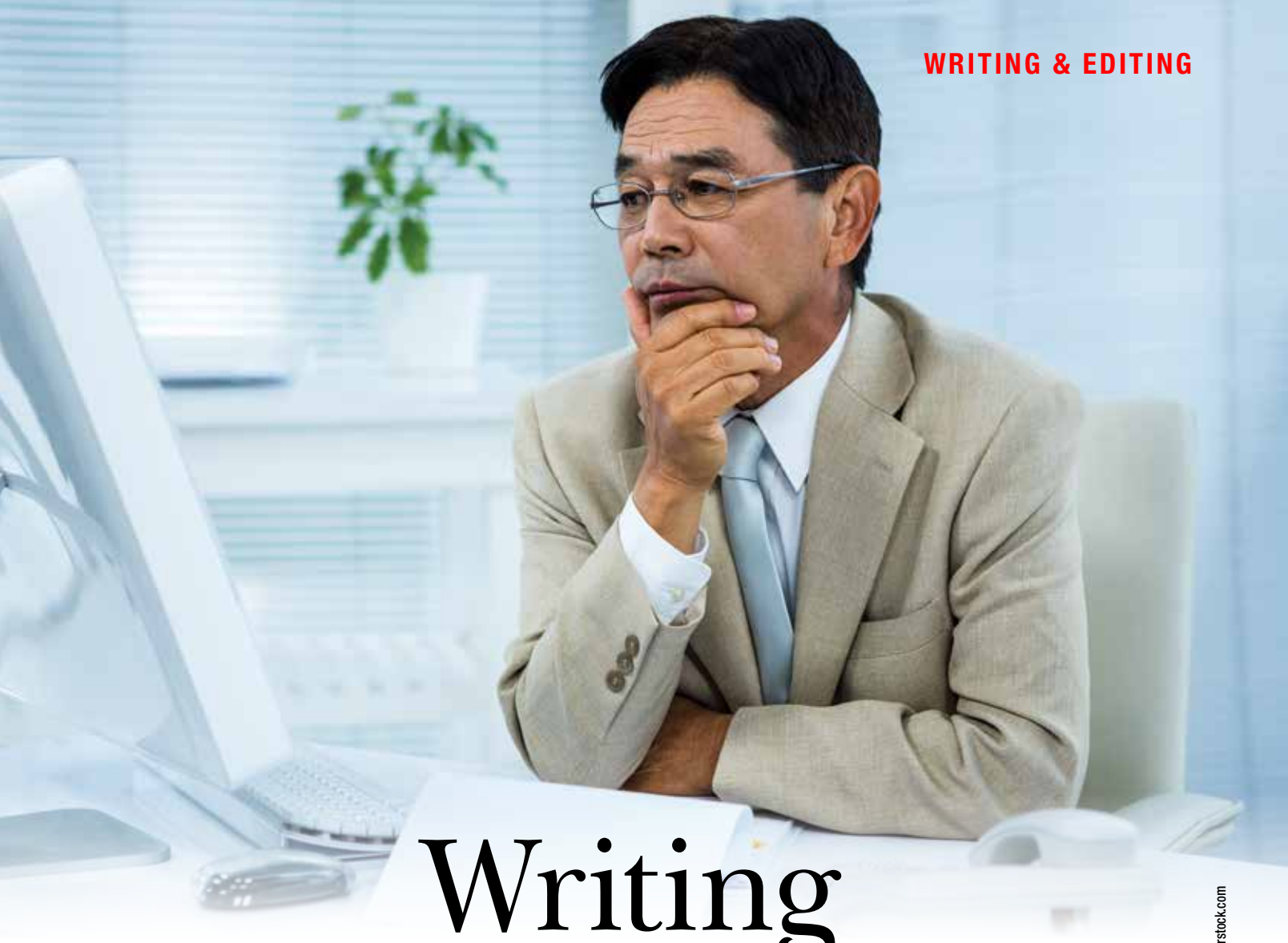
Try to avoid jargon in the content. Translators may not understand the meaning of jargon languages due to different cultural backgrounds. When the description is translated into target languages, these translators may translate in a literal manner or word-for-word format. The original meaning of the material will be totally changed and may even lead audiences in another direction.

6. Use Active Voice Throughout the Content

Active voice is more direct, better understood, and easier to translate because it contains less words than passive voice. When text is translated into different target languages, audiences of other cultures will be able to understand and experience less confusion.

When technical writers write for translation, they should realize that they are writing for international audiences, and all of these important factors should be applied to the content, which will make the editing process easier. Communication becomes effective abroad only after the message has been translated accurately. Technical writers and translators should work together as a team to make cross-cultural communication successful for global audiences.

FRANCIS BAO, *a technical communicator since 1996, is currently working as an independent consultant in the Chicagoland area. His major specialties include technical writing and translation. He has been an STC member since 1997 and became an Associate Fellow in 2015. He has served many roles in the Chicago Chapter, including treasurer, vice president, president, and immediate past president. He has also been a manager of education, advertising, science fair, nominating, and (currently) sponsorship committees. He is a member of the Chicago eLearning & Technology Showcase Advisory Committee, as well as a member of STC's International Technical Communication SIG and Technical Editing SIG. He has written a number of articles for the Chicago Chapter newsletter,* Byline, *and the TE SIG newsletter,* Corrigo. *Francis is currently a contracted technical translator of Linguava Co. in Oregon. He specializes in translating from mandarin Chinese to English and from English to Chinese.*



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Writing Complex Concepts Was Never So Easy

By GIRISH HASABNIS | *STC Senior Member*

MARK, A TECHNICAL WRITER working on a suite of sophisticated medical imaging products, is often challenged to write the conceptual information for the product documents. Explaining the complex medical information to laboratory operators and clinical executives with little or no medical knowledge is very crucial. In this area, an error in understanding a concept can have serious consequences. Thus, Mark is always diligent in authoring the content. He thinks that if the readers know all the business scenarios, they would be able to use the product to its fullest potential. So, Mark always tries to find various approaches and methods that will help him explain the complex features with the use of real-life examples.

Many writers can relate to the example above. We as writers always use the famous WH-type questions (what, when, where, why, who, and how) to explain concepts. The techniques described in this paper can be used with WH-type questions to write about complex concepts easily.

State a Business Problem

Business problems or challenges help readers relate to a problem they face or a problem faced by someone else. This approach works best when the product or feature is newly introduced in the market.

Example

To explain the introductory information for a software product that is developed for the supply-chain management industry, you might use the following text:

In the globalization era, organizations endeavor to deliver the right quantity of products, at the right time, and at the right location. In order to achieve this timely delivery of products at the desired locations, organizations have to retain world-class services and fulfill customer needs. XYZ helps you solve the business challenges by:

- *identifying the customers and their needs in advance*
- *coordinating with manufacturing facilities that are spread globally*
- *helping you plan delivery schedules in advance*

State a Management Concept

Management concepts are the best tools to impart the practical knowledge and profound thinking that goes in the development of a feature.

Example

The following example demonstrates the use of this technique to explain the Graphs feature to its readers:

Graphs help you understand and compare the vital business information easily. Use graphs to analyze the health-related vital information of the patient visually. You can also understand various parameters of the patient's health, such as blood pressure, WBC count, and so on.

Compare the Product with Another Product

Comparing a product with another known product helps you identify the differences easily and sets a frame in the reader's mind about that product. One tip is to select the product that your reader is already familiar with. You can list the differences in a tabular form or in an unordered list.

In this approach, you can compare the product or the feature with:

- its competitor product (or feature)
- its previous version

You might use this approach to write white papers, training materials, or any knowledge-based documents.

Example

In order to emphasize a new feature that is present in the latest release of the medical software, you might want to begin as follows:

Starting with the sixth maintenance release of XYZ, you can view the medical information of multiple patients simultaneously. By viewing the medical information of multiple patients simultaneously, you can compare and analyze the medical data and perform benchmarking easily.

State the Benefits

Benefits help readers understand the importance of a product and how the product can ease their lives.

Note that benefits are different from features. A feature is a distinctive attribute or aspect of the product. A benefit is an advantage that the user receives or obtains by using the product.

Example

To explain the benefits of cloud computing, you might start as follows:

Cloud computing provides you with the following benefits:

- *flexibility to meet business demands (for example, to scale resources up or down)*
- *reduction in expenditures on complex disaster recovery plans as cloud computing providers take care of most issues*
- *automatic software updates*
- *the opportunity to pay as you go, which reduces capital expenditure*
- *increased collaboration by allowing stakeholders to synchronize and work on documents and shared apps simultaneously*
- *the ability to work from anywhere as long as you have Internet access*

Define and Explain the Feature

Explain the purpose of the feature so that readers can use that feature in a given situation. You might want to explain the validations and conditions of using the feature.

Example

The technique is explained with the help of a fictional mobile feature, Easy View.

Easy View is a friendly yet intuitive user interface experience with simple setup and core functions. You can turn the Easy View on in order to simplify the clutter of apps that always run behind the screen. You can choose the apps that you want to run in the background. Easy View also helps you view the most important information first.

Explain the Product and Its Components

Explain the core concept at first and then describe its intricacies. This approach can be used when the product consists of multiple components or modules.

Example

The following example is an excerpt taken from SAS Institute Inc. that explains its Base SAS product:

Base SAS provides a scalable, integrated software environment specially designed for data access, transformation and reporting. It includes a fourth-generation programming language; ready-to-use programs for data manipulation, information storage and retrieval, descriptive statistics and report writing; and a powerful macro facility that reduces programming time and maintenance headaches.

Base SAS includes these items: Procedures, DATA Step language, DS2 language, SAS FedSQL language, Macro facility, Output Delivery System (ODS), and ODS Graphics.

(http://support.sas.com/software/products/base/)

Give Generic Information First

Generic information sets a frame of reference in the reader's mind. Specific information provides more data on the given subject.

Example

The following example is an excerpt taken from SAS Institute Inc. that explains SAS Management Console:

SAS Management Console provides a single point of control for managing resources that are used throughout a business intelligence environment. Rather than using a separate administrative interface for each application in your computing environment, you can use SAS Management Console's single interface to perform the administrative tasks required to create and maintain an integrated environment across multiple platforms. SAS Management Console enables you to manage

- *server definitions*
- *library definitions*
- *user, group, and role definitions*
- *resource access controls*
- *metadata repositories*
- *job schedules*

(http://support.sas.com/software/products/sasmc/)

Explain the Most Significant Information First

The most important information sets the context for the reader. After providing context, then explain the rest of the information.

Example

The following example is an excerpt taken from SAS Institute Inc. that explains the most important concept first and then the rest of the information to the system administrators:

An authentication domain is a name that facilitates the matching of logins with the servers for which they are valid.

Note: This matching is not important when you launch a client, but it is important when you access certain secondary servers such as a third-party DBMS or, in some configurations, a standard workspace server.

Each user ID and password is valid within a specific scope. For example, the user ID and password that you use to log on to your computer at work are probably not the same as the user ID and password that you use to log on to a personal computer at home. It is also common for database servers and web servers to have their own authentication mechanisms, which require yet another, different, user ID and password.

An enterprise application that provides access to many different resources might require that a user have several sets of credentials. Each time a user requests access to a resource, the software must determine which credentials to use to provide access. The software could challenge the user with an interactive prompt for user ID and password, but that quickly becomes an annoyance that interrupts the user experience. The software could randomly try different credentials until it finds a set that works, but authentication attempts can be expensive in terms of performance. In the SAS Intelligence Platform, the software attempts to use only the credentials that it expects to be valid for a particular resource or system.

The software's knowledge of which credentials are likely to be valid is based entirely on authentication domain assignments. For this reason, you must correctly assign an authentication domain to each set of resources that uses a particular authentication provider, and also assign that same authentication domain to any stored credentials that are valid for that provider.

(http://support.sas.com/documentation/cdl/en/bisecag/69827/HTML/default/viewer.htm#p1du6ccnyjmlkdn1pwc9q11m088w.htm)

Use Progressive Revelation or Sequential Disclosure of Information

Explain the concept as it is happening so that it will unfold in a logical sequence. This approach helps you construct the building blocks in the reader's mind so that they understand the concept easily. This approach can be used to explain the workflow of using a product or to explain a process.

Example

The following example is an excerpt taken from SAS Institute Inc. that explains SAS Cloud Analytic Services.

What Is SAS Cloud Analytic Services?

- *SAS Cloud Analytic Services is a server that provides the cloud-based run-time environment for data management and analytics with SAS. By run-time environment, we refer to the combination of hardware and software where data management and analytics take place.*
- *The server can run on a single machine or as a distributed server on multiple machines. The distributed server consists of one controller and one or more workers. This architecture is often referred to as a massively parallel processing architecture. For both modes, the server is multi-threaded for high-performance analytics.*
- *The distributed server has a communication layer that supports fault tolerance. A distributed server can continue processing requests even after losing connectivity to some nodes. The communication layer also enables you to remove or add nodes from a server while it is running.*
- *SAS Studio provides a programming environment for developing and submitting programs to the server.*

(http://go.documentation.sas.com/?docsetId=casfun&docsetVersion=3.1&docsetTarget=p1gv1icmp7iyytn1677ojfohabiv.htm&locale=en#n08n5eqzx1zizfn1d4hqz6u4xquv)

You can add many more techniques to the above mentioned list to further simplify the process of writing concepts. These approaches help you identify the patterns, bring more clarity in the concepts, and save you writing time.

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MadWorld 2017 Review

By JAYNA LOCKE

ATTENDING A CONFERENCE is a perk that every writer should experience on occasion to increase knowledge and exchange ideas with like-minded souls. MadWorld 2017 reminded me of this fact, as it was rejuvenating in many tangible and intangible ways. This was my third year at the conference, and I was there both as an attendee and a presenter this year.

The topics at the heart of the conference are MadCap Software's growing arsenal of products designed to ease the burdens we bear in the process of authoring user documentation and training. If you are reading this, you know the burdens of which I speak—the numerous challenges involved in developing intelligent, well-organized content that is easy to manipulate, single-source, publish, and translate on our end of the content chain, and easy to search and navigate on the user's end.

I'll return to the intangible benefits of the MadWorld experience later. The most palpable benefit is the knowledge gained. You can attend presentations by real experts with deep understanding of the tools who provide tips, best practices, and cool secrets that you may or may not figure out on your own. Some of these can be huge time savers in practice. In the hospitality lounge, working with the MadCap Technical Support team you will get answers to your in-depth questions.

Why We Attended MadWorld 2017

My team adopted MadCap's primary offering, MadCap Flare, about a year and a half ago, and we have been getting to know its vast inner workings ever since. You can learn the tool to the point of being effective in a day or two, which belies its power. Really developing expertise is a matter of time and familiarity. And we are getting there, but there is always more to learn.

Three of us attended MadWorld 2017 from my team, and therefore we were able to get fairly optimal coverage of the event's proceedings. The challenge was that there were few presentations that weren't relevant to my interests, and I wanted to attend them all. Imagine having to choose between "Tips for a Successful Content Audit," "Tips for Enhancing Your Authoring Experience," "MadCap Central: Project and Task Management," and "Employing User Experience Concepts and Design Methodologies in Your Documentation." It was an embarrassment of riches.

Fortunately, MadCap captured an audio recording of each presentation. The question and answer sessions provide a gold mine of wisdom, and of course those are captured in the audio. What you won't get from the post-conference materials are the live demos. A number of presenters stepped out of their PowerPoints and got into the tool to demo specific features in depth, which means you simply have to be there.

Key Takeaways

You can tailor your experience at MadWorld, choosing from the sessions most relevant to you, so the takeaways are highly individualized. Of course, this almost goes without saying, and is not unique to MadWorld, but I experienced

this very keenly at this particular conference. My two team members and I created a combined calendar with our selected sessions, so we had it all planned in advance. I created a content strategy track, and my team members selected the presentations relevant to their needs and interests, as one of them is an experienced user and the other has only been using the tools for a few months.

Here are a few takeaways from our collected notes:

- Create snippets for table styles you use regularly. Drop in the snippet then convert it to text. (Presenter: Nita Beck)
- Use a shortcut to access styles. Do Ctrl-Shift-H to pull up the style list. Start typing the style name, and select it from the list. (Presenter: Derek Warren)
- Use MadCap Analyzer not only to clean up your project (e.g., find topics in your project that are not in your TOC), but also to check files in and out of source control. (Presenter: Denise Peña)
- Create tag clouds of related topics, using a MadCap Flare plug-in, instead of maintaining relationship tables. (Presenter: Scott DeLoach)
- Use conditions to tag content for a range of reasons, such as critical "must fix" items and "triage" items that require additional research or SME assistance. (Presenter: Denise Kadilak)

View from the Pulpit

Presenting for the first time at MadWorld was a great experience, and I hope to do so again. I presented two case studies from my team's journey. One focused on how and why we chose MadCap tools over another solution, along with the money and teeth-gnashing spared in the process. The second presentation covered our combined use of MadCap Flare and Confluence for collaborative development in our global, agile environment.

The coolest thing about this experience was the confirmation that others in tech comm are leaping over the same hurdles as we are. I think I learned as much from my presentation attendees in the rich Q & A at the end of my sessions as they learned from me.

It was also tremendous fun to get to know the other presenters. These are all lively, interesting, down-to-earth people who are passionate about sharing knowledge and helping others to succeed.

The Venue

Let me start by saying that MadWorld takes place in San Diego in April, and there are far worse places and seasons to travel. I will not, for example, suffer Las Vegas in the summer months. But I digress. San Diego is lovely and is graced by both the Pacific Ocean and the enormous Mission Bay. You can traverse the city very easily via Lyft, and it's virtually impossible not to have an awesome time.

Each year that I have attended MadWorld, the venue has changed because the number of attendees increases, requiring a larger location each year. This year we were at the Hard Rock Hotel, which is festooned with rock and roll memorabilia and pictures. Our one poor experience was with the hotel's handling of guests who arrive for early check-in. My two team members were given erroneous time estimates on the availability of their rooms and wasted hours waiting for a text message that never came. Had they known it would be a four-hour wait, they would have gone out to enjoy the city.

The Intangible Benefits of MadWorld

I love this conference for many reasons, not the least of which is putting on capris and getting my feet in the sand in early April, which is still winter where I hail from (Minneapolis). It's also a really great event. The MadCap team treats the conference attendees to buffets of excellent food, regular breaks for pick-me-up goodies and coffee, and after-hours social events, not to mention the little boxes of gummy bears we found on our pillows one night. As an attendee, you never need to spend a dime on food from the moment the conference begins until the final social.

Most importantly, these events offer the opportunity to network and exchange ideas with colleagues and tool experts, and shake off the cobwebs.

We have a fairly solitary line of work, as tech comm professionals. The result is that in the normal course of doing business, it can be very challenging to gain perspective. Attending the occasional conference where you can rub elbows with other career technical writers is an excellent antidote. If you are a current or potential MadCap Software user, MadWorld is an opportunity to talk with other writers and tool nerds, get ideas, and even rethink some of your own practices and methodologies.

Also, until they achieve full celebrity status and require bodyguards, you can have a beer with long-time MadCap Flare trainers like Scott DeLoach and Neil Perlin and say, "Tell me more about that cool tag cloud plug-in."

For more information, including the 2018 Call for Papers, visit www.madcapsoftware.com/events/madworld/.

JAYNA LOCKE *is a content strategist with a background in technical communication and digital marketing. Her experience includes content strategy, SEO work, user experience analysis, project management, Web development, copy writing, technical writing, team building, and technical publications team management. Her team began testing MadCap Flare for some content in 2013, and moved to full adoption in 2015.*

Technical Communication Is, Too, Sexy!

Dejan Popovic/shutterstock.com

By SUSAN HAIRE | *STC Associate Fellow*

MANY YEARS AGO, my family and I did the tourist gig in Washington, DC. We visited most of the Smithsonian museums (some twice), but the one that impressed me the most was the Air and Space Museum—not the sleek space capsules or vintage planes, but the Apollo 11 exhibit, specifically, the thick tomes of paper, taking up two to three feet of space on a shelf, that documented everything from the engineering specifications to the flight manuals that astronauts took to the moon to help them fly their spacecraft.

I'm not saying all that paper made it into space, but a good chunk of it did. Think of the daunting task of reading all those pages—not just reading them but learning their content. Think of the dedicated writers who created those pages. Think of the weight!

We've come a long way since those days. Now most of our documentation is produced online. Those moon-landing manuals could now fit on a single flash drive.

Fast forward a decade or so. I'm sitting on the advisory board for the technical communication diploma program at our local college, and the committee is discussing low enrollment. One member finally said, "Let's face it; technical communication just isn't sexy."

I thought about those many inches of paper in Washington. What I should have done was jumped up and indignantly cried, "It is, too, sexy!" But I didn't. I hesitated, and the moment was lost.

So today, I want to correct that mistake. I want to prove to you that our profession is a sexy profession, one we can be proud to acknowledge, and to provide you with ammunition the next time someone asks you why you work in such a "boring" career.

Boring? Hah! What other career allows its practitioners to employ the skills of not one, but many professions? Yes, grammarian and spell checker are the obvious ones. After all, grammar and spelling are the foundation of our work, and in a way the very definition of a writer, no matter what kind. But did you know technical communicators are also detectives, diplomats, entertainers, psychologists, teachers, cryptographers, and graphic designers, to name a few?

Let's take these titles one at a time.

- **Detective:** Have you ever been handed a piece of software and been told, "We need the user manual by the end of next week, but don't bother the programmers because they're on another project. Notes? No, I don't think they kept any notes."? So what do we do? We put on our deer-stalker hat, load up the software, and start digging. We explore what the program does, figure out how users would use it, and tunnel into the "what ifs" to create a troubleshooting chapter (because we all know the only time many users actually read the manual is if something goes wrong). These skills aren't restricted to software manuals. All documentation, whether policies, advertising, or simple instructions, depends on audience analysis. And what is audience analysis if not detective work?
- **Diplomat:** Few of us work in the political arena. Most of us don't need to write carefully about sensitive subjects that could affect national security. But diplomacy isn't limited to government offices. In the world of technical communication, diplomacy is most often demonstrated in the art of presenting warnings and error messages in a positive tone. No user wants to get a message that says, "You failed to do X" or "We told you not to do Y, but you did it anyway. Can't you read?" And no, we probably wouldn't write the last one that way, but we do try to find more positive, *diplomatic* ways of admonishing our users. In the first case, we would probably reword the message to something like, "To avoid this issue in the future, remember to do X." In the second ... well, I'll leave that to your imagination.

- **Entertainer:** We need to keep our readers engaged. There's nothing that puts me to sleep faster than pages and pages of dense paragraphs. I pity my reader and break things up with white space, page design, images. Online, I include color and motion, mini-videos and, where appropriate, humor.
- **Psychologist:** We're back to audience analysis. We are familiar with the traits of adult learners and recognize that not all users learn in the same way. We provide bulleted lists for text learners, annotated graphics for visual learners, even audio overlays for aural learners. We try to incorporate different approaches to the same topic, in hopes that our users will find one that resonates with them.
- **Teacher:** We don't only have to write training manuals to be teachers. Anything we write, from corporate policies to the monographs accompanying prescription medication, is at its heart designed to teach someone something.
- **Cryptographer:** I'm not talking about solving coded messages here. I'm talking about interpreting the handwritten source material from your subject matter experts, or edits from your reviewers. Many times, I've had to recruit other writers to try and figure out what a word or phrase actually says, and I lament the days when Handwriting stopped being considered a valuable subject in schools. My grandmother had a beautiful flowing script. I read her old letters with great pleasure. Then I look at the Christmas card from my son and am glad that it is labeled to "Mom and Dad."
- **Graphic designer:** We may not be formally trained in graphic design, but we employ the techniques, sometimes without even realizing it. Page design, job aid fonts, and image placement are all critical to getting our message across in a way that will not bore users and will make sure they can easily pick out the most important information from the background "noise" of explanatory text. A great example is airplane safety cards. Very few words are visible, but the messages on the card are clear and easy to follow.

Still not convinced? How about this?

Technical communication has been around for thousands of years. Do you think the pyramids were built without instructions? Engineering and architectural drawings are a type of technical communication, designed to relay information to other engineers and architects and builders. How about the first cave man who painted pictures on the walls of his home? One idea discussed on *creativedisplaysnow.com* theorizes that cave paintings were used as a manual for instructing others as to what animals were safe to eat. Even if that's not the case, someone had to explain to their friends how to make the pigments used to color the paintings, and that's technical communication.

Our job, at its simplest level, is to help people do what they need to do quickly and easily. A colleague of mine once said that if your users notice the technical writing, then you're not doing it right. Technical communication is subtle. We fix the unfixable, explain the unexplainable, all in such a way that nobody notices. Unless you're writing a book that specifically explains something, what we do and how we do it should remain invisible.

Technical communication comes in all forms. Think of the London subway system map. At first all you see are lots and lots of colored lines, but as you focus and locate your station, the map begins to make sense. Travellers can find their way from any part of London to any other part just by consulting a deceptively simple map that can fit in their pocket. That's technical communication at its best.

If you want more examples, just look at the "My Job" column in STC's *Intercom* magazine. Over the years, I've read about technical communicators at Cirque du Soleil, in Antarctica, at the Cheesecake Factory, in casinos, at Disney, in hospitals, factories, museums, and prisons. And, of course, at NASA.

I could go on forever, but you get the idea. Ours is a versatile, wide-ranging profession, with applications in all walks of life.

So be proud of what you do. Encourage those reluctant technical communication students who question the wisdom of choosing this profession. Remind yourself that the world wouldn't have come this far without us.

I'd like to leave you with one of my fondest fantasies. How many of you have seen the James Bond movie *Goldfinger*? There's a scene where Q, Bond's long-suffering quartermaster, is explaining the features of the car Bond will be driving, including the oil spill and ejector seat. The scene ends with Bond's enigmatic smile, but I have a vision of the few seconds *after* the camera stops rolling, when Q hands Bond the user manual. What? Do you really think Bond remembered all those instructions just from that five-minute conversation? You bet he read the manual. His life depended on it!

Technical communication isn't sexy? Think again.

SUSAN HAIRE *has been a technical communicator for over 30 years, and has written everything from computer manuals to herbal diet brochures to government policies and procedures. She is currently a lead writer for Manitoba Public Insurance, a major insurance company in western Canada. A long-time member of STC, Susan has presented workshops at the Annual Conference and to her local chapter, including a session on this topic. Susan is a passionate advocate of all things "tech comm" and can be reached at* susan_haire@hotmail.com.

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EXPAND YOUR NETWORK, strengthen STC and your community, and win prizes by speaking with other professionals about membership in STC! The 2017 community membership race will start on **22 May 2017** and end on **1 September 2017**. This campaign is designed to help communities recruit new members to join STC and their chapter or SIG. All community members are encouraged to participate in this event.

Participating is easy! Chapters and SIGs receive points when a member from their community recruits a person to join or renew their STC membership online. When recruiting, please instruct the new member to include the name of the referring chapter or SIG in the **Referred by** box on the My Demographics page in the online membership application. **The community must be listed on the membership application to receive credit.** One point is awarded for each member in any of these four categories: Classic, New TC Professional, Student, or Gold Value Package member.

Go to *https://www.stc.org/membership/join-or-renew-now/communities-recruitment-race/* for more recruitment tips, campaign details, and a list of prizes to win! **Let's see which community crosses the finish line first on 1 September. Good luck!**

Questions? Contact us at +1 (703) 522-4114 or email *membership@stc.org.*

Technical Communication Call for Cover Illustrations (February and May 2018)

STC IS PLEASED to announce the call for cover illustrations for the February and May 2018 issues of *Technical Communication*. The deadline for submissions is 1 December 2017.

For the February 2018 issue, we invite cover illustrations on the subject of **changing standards in grammar and punctuation**.

For the May 2018 issue (a special issue on project management), we invite cover illustrations on the subject of **project management**.

Cover illustrations might be diagrams, drawings, photographs, collages, infographics, cartoons, comic strips, or brief graphic narratives.

For either issue, please submit your cover illustration (approximately 20x20 cm or 8x8 inches) as a high-resolution (300 dpi or better) jpg file by **1 December 2017** to Editor Sam Dragga at *tceditor@stc.org* with a brief explanation (100–200 words) of how your illustration addresses the cover subject. A five-member international jury of specialists will organize anonymous review of the submissions and choose each issue's cover illustration. Honorable mentions will be published inside the journal.

To view previous winning cover illustrations, please visit *www.stc.org/techcomm/propose-a-cover-illustration/.*

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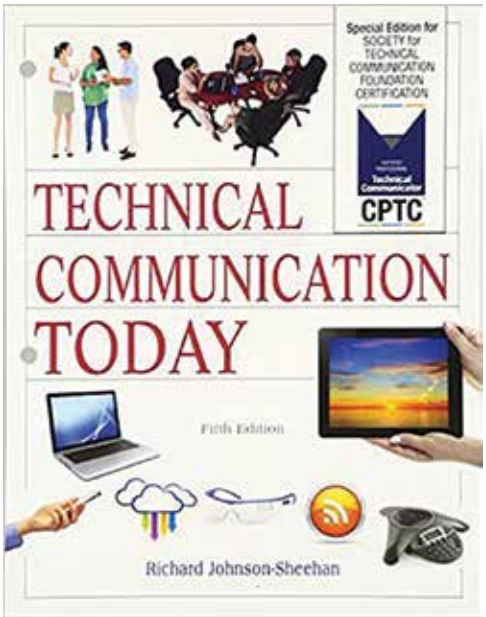

Be Part of the Solution

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BY LINDA ROBERTS | *STC Fellow* and **LISA COOK** | *STC Fellow*

WHEN WE OVERHEAR people speak about accessibility, we often hear them say that they want to be part of the solution, but they don't know how to be. So what are some things an online communicator can do to enhance the accessibility of his or her website, FAQ, or mobile site? The World Wide Web Consortium (W3C) spells out some of the "easy checks" that technical communication practitioners can perform during their design process to address the usability of their online communication.

Misleading Use of Structural Elements on Pages

Don't use heading elements for emphasis or because you like the way the font and weight of the heading element looks on the screen. A visual user usually does not notice this shortcut, but problems arise when accessibility devices are used. Screen readers use the Web page's structure to help users who are visually impaired navigate through the page. Some screen readers even allow a user to jump from one heading to another so that they can get a feel (or outline) for what information is contained within that page. Misused heading elements can cause confusion by giving minor content pieces an undeserved importance, and a lack of headings can leave a user feeling left out. Hierarchy of headings conveys structure and helps non-visual users construct a mental map. Use the structure that templates provide or create a structure if you or your organization does not already have one.

Images Without Alternative Text

People with disabilities such as blindness or low vision rely on assistive technologies (ATs) to read the information on a Web page to them or to send the information to a Braille writer. If a Web page contains an image, then you need to provide a text equivalent, that is, concise and descriptive text to describe the function of each graphic, image, and animation. Avoid contextual references such as "click here" because they have little meaning when they are read aloud. Don't think that if you leave out alternative text for any images that these images are skipped over by ATs. If alternative text is left out, then an AT might just say "picture," "graphic—untitled," or read the contents of the src attribute, which is the name and physical location of the image file. These options can be very long and confusing. In addition, the inclusion of meaningful captions and alternative text might enhance search results and bring other users to your content.

Sites with Poor Color Contrast

About one in ten American males have some type of colorblindness. Colorblindness, however, rarely affects women. Also, low-vision conditions (such as macular degeneration and diabetic retinopathy) increase as people age. The most common combination of colors which poses problems is red/green color combinations. With this condition, a person cannot distinguish between some shades of red and green. To test for color-contrast, use one of the many free color-contrast checkers and low-vision simulators that are available online. You can also change any of your graphics to grayscale in the software.

Consider, also, low vision conditions. For example, GPS devices often automatically switch to a dark background and light foreground in low light situations. Providing a high-contrast option can help not only low vision or colorblind users, but also other users who need the contrast in certain situations, such as reading in dimmed lights on an airplane.

This column shares information about accessibility requirements and techniques, and introduces standards and policies that might affect your products. If you have feedback, contact Linda Roberts at *lerober1@yahoo.com* or Lisa Cook at *Lisa.Cook@sas.com*.

Information Is Usable When the Text Size Is Scalable

Most browsers allow you to manipulate text size on a Web page using text size settings, text-only zoom, and page zoom. If you do not plan for these changes, then text might be unusable when the text size is changed. Columns and sections can overlap when zoomed, lines of text run off the screen, or whole chunks of text might disappear. Luckily, it is easy to check for this. Use a variety of browsers and devices to check to see what happens when you change the text size. For mobile consumption, be sure to check multiple operating systems for apps and browsers.

Keyboard Access to All Elements

Many people use only a keyboard to interact with a Web page. In addition, some assistive navigation devices rely on keyboard access to function. Because of this, keyboard focus (like a border or highlight) should be apparent in the Web page and should follow a logical order through your Web page elements. To test for keyboard access, put your mouse aside and use the Tab key to move through your webpage. Make sure that you can tab to and away from all links, form fields, buttons, and media player controls.

Multimedia Alternatives

If you include videos or audio clips in your Web pages, you should provide captions and transcripts not only for people who cannot hear, but also for people who might work in open areas and have the sound on their computers muted or turned off. Provide a text track of the audio or video's dialog (and other sounds) in a file so that it can be synchronized with the audio or video's soundtrack. The text file should be a word-for-word transcript (if possible). We'd go into detail about how to generate these files, but Karen Mardahl wrote an excellent *Intercom* article (in January 2011) titled "Captioning Videos on YouTube" that details the process. As with alternative text and image captions, an available text transcript might render your audio or video content more readily findable by search engines, thus broadening its audience.

Like everyone else, what people with disabilities want isn't just information, but also a quality and equitable experience. Keeping these techniques in mind can help you deal with some basic accessibility issues before your online information goes live and might help to reduce re-work and re-design.

"I HAVE AN INCREDIBLY VALUABLE RESOURCE FOR LEARNING AND NETWORKING THANKS TO STC"
"I joined STC after I took a job several years ago as a lone writer. STC became an incredibly valuable resource for me—for education, for learning about the profession, and just for meeting and connecting with other people in the field. As I have become more active in STC, I have gotten even greater value from my membership. The leadership experience has been invaluable, and I have forged friendships with some amazingly talented people."
Jane Wilson
MY NAME IS JANE WILSON AND
I'M AN STC MEMBER
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Problems of Agency in Visual Risk Communication

BY DANIEL P. RICHARDS | *Guest Columnist*

IF WE BELIEVE scholars Johndan Johnson-Eilola and Stuart A. Selber, technical communication is all about solving problems. Well, I currently have a problem: The city I now call home is prone to flooding. And everyone who lives here knows it, but isn't quite sure what to do about it. Ranked second behind New Orleans, LA, in United States cities susceptible to sea level rise (Montgomery 2014), our historical, naval-base dominated locale of Norfolk, VA—lucky as we've been without a major hurricane since 1933—is quite vulnerable, due in no small part to overwhelmed drainage systems, ground subsistence, and the rivers that meander so beautifully, but so piercingly, through the heart of our city.

Fortunately, the city planners and coastal managers taking charge of this problem have access to a certain type of data visualization tool that should be—and are (Kain and Covi 2013; Stephens et al. 2015; Herring 2017)—of interest to technical communicators: interactive sea level rise viewers. Emerging as a genre almost in and of themselves, these online, publicly accessible viewers afford users the opportunity to interactively overlay flood and sea level rise data on top of maps, so as to visualize the effects of water inundation of a given region or community. Planners and managers can then use these open exploration visualizations to communicate to various stakeholders in their communities about their infrastructural vulnerabilities and risks to residents.

Figure 1. Climate Central's Risk Zone Map

On the surface, sea level rise viewers, such as those developed by NOAA and Climate Central (see Figure 1), respond to key principles of research in risk communication about the effectiveness of visualizations to augment raw data (Lipkus and Hollands 1999) as well as the importance of local "place" in the communication of risk (Scannell and Gifford 2011). They help city planners and coastal managers do better work and communicate more effectively to public stakeholders. As you might imagine, however, as publicly accessible tools, the general public might not find them that useful, or as engaging as they might be.

Responsibility of Access

When a lay user in a coastal town discovers these tools, they might soon realize that these tools were not designed for them and they are not responsive to their own needs. Take, for example, NOAA's Office for Coastal Management's *Digital Coast*, which has its own sea level rise viewer fully available to the public online. When a user enters the tool, they see a disclaimer about how it is a screening-level, planning-reference tool wherein the user accepts all risks, and has the purpose of providing "coastal managers and scientists with a preliminary look at sea level rise and coastal flooding impacts" (NOAA 2017). Other tools, such as the U.S. Geological Survey's and Climate Central's, provide no such disclaimer. Even so, users might not even be prone to read the technical disclaimer anyway (Siegel and Etzkorn 2013).

My own qualitative research observing how lay residents use a sea level rise viewer (Richards 2016), as well as other research done with subject matter experts (Stephens et al. 2016), indicates that people who are not coastal managers, but who stumble upon these publicly accessible websites, might not be making accurate assessments of their region's vulnerability. The tools might be too complex for them to use.

Given the scientific look of these tools, and their engaging and cutting-edge features, residents might think their home is safe up to eight feet of inundation, when in fact it would be at risk from three feet of storm surge. They might believe they are safe during a Category 2 hurricane, but have not accounted for the accrued risk of sea level rise over the next 20 years. While the visual nature of the tool might lead to engagement, it might also lead to overconfidence; while the open exploration nature of the tool allows for personalized choice in risk data, it also allows more room for error. And given what is at stake, the last thing we

This column features ethics scenarios and issues that may affect technical communicators in the many aspects of their jobs. If you have a possible solution to a scenario, your own case, or feedback in general, please contact column editor Derek G. Ross at *derek.ross@auburn.edu*.

Editorial Note

Thanks to the Internet, we, as a general public, have access to powerful, often free, analytical tools. We can crunch numbers, create charts and graphs, build infographics, and map our way to anything and everything. We can track health issues with tools like Flu Near You *(*flunearyou.org*), and we can track environmental issues like sea level rise with such tools as* Climate Central's Surging Seas Risk Finder *(*sealevel.climatecentral.org*). All of this access to analytics is good, right?*

In this month's column, Dan Richards asks us to think about the ethics of providing expert-level analytical tools to a lay public, and to consider how tools designed for audiences with complex understandings of events and constraints might, in some ways, mislead non-expert audiences. In working through his analysis of sea level visualization tools, he asks us to consider a few important questions. For example, is there such a thing as too much agency? What are the risks of putting powerful technologies in the hands of audiences who may lack understanding of surrounding complexities?

As always, we welcome your responses, and we trust that your conversations on our columns have been engaging. Let us know your answers to the questions we've posed, your thoughts on our roles as technical communicators in general, or send us your own ethics cases or column ideas. Please send your responses to derek.ross@auburn.edu. *Responses will be printed in an upcoming issue of* Intercom *as space permits.*

—Derek G. Ross

need are lay residents using scientific tools to make erroneous assessments of the risks to themselves and their communities when it comes to flooding and sea level rise.

A Question of Agency

Sonia Stephens (2015) poses a useful question in regard to these tools: is there such a thing as *too much agency*? Stephens argues that all too often agency is constructed as inherently good, indeed, a capacity that most individuals want in a given situation. Agency means choice, agency means access, agency means power.

But are there situations in which perhaps users of a technology can have too much agency? To answer this question, Stephens differentiates between the first space of agency and the second space of agency. The first space refers to the degree of rhetorical choice afforded by a given interactive tool. Rawlins and Wilson (2015) use this first space in their analysis of interactive data display technologies to create a sort of typology of agency in interactive tools. Generally speaking, the more agency the user has, the more robust an argument a user can make in their data visualization.

The second space for Stephens, however, refers not to open data exploration or visualization but to the applied aspect of interactive tools—the aspect of these tools that allow for "making real-world decisions" (2015). She argues, in essence, that we as technical communicators should not conflate design agency with decision-making agency, not conflate use with usefulness, to borrow from the work of Barbara Mirel (2004). Having at your disposal as a user the ability to locate your city, select from demographic or property value layers, then slide an inundation meter up and down is a different type of agency than using these tools to decipher where, for example, you should buy when relocating to a new but vulnerable city.

Increasingly there is a concern in academic circles to think about agency, both in terms of nonhuman agency and in terms of designed technologies that allow people to achieve their own goals. The problem in the actual execution of this is that in providing so many inlets or opportunities for agency, there is a corresponding and correlative risk of error, or given lack of expertise by the user. And we should consider the fact that, while designed for experts, these tools are publicly accessible and sometimes offered with limited disclaimer. What sort of responsibilities do these agencies and organizations have in ensuring accurate risk assessments in these reliable-looking Web tools?

The Power of Constraints

This question is inherently an ethical one: if these complex tools exist and are openly promoted in online public spaces, accessible to all, but designed for experts in coastal management, then what sort of constraints could and should be placed on them? Is a disclaimer, which most users will not read in their rush to see visualization, enough to mitigate against this? Need NOAA and Climate Central create separate tools, setting up a bifurcation between SMEs and lay users? Should these tools sacrifice design choice in an effort to promote more accurate risk assessments?

Figure 2. NOAA's Sea Level Rise Viewer

In speaking with the users in my own research, what most of them wanted were pre-set scenarios. They wanted cut-and-dried information about what would happen if X took place next year in their neighborhood, or what would happen if Y took place around their grandparents' house in Florida. When faced with the sheer complexity of information, even in a visual mode attempting to simplify risk data, they wanted resonant, familiar events they could visualize.

NOAA, as of this year, has created a beta version of their sea level rise viewer, which includes a *Scenarios* feature on the tool (see Figure 2)—but even this feature pertains to high-level information about data projections and the effects of sea level rise on their region. Users will want more concrete scenarios, more relatable and structured scenarios to better help understand their risks and thus make more informed decisions, which is, after all, the intended purpose of these tools.

Information designers and technical communicators can play significant roles in making these tools more amenable to public use by studying how real, local residents use them, and discovering the types of scenarios or situations most on their minds when thinking about purchasing property, relocating family, or selecting schools for their children. Perhaps more concrete scenarios, such as a "Hurricane the severity of Sandy" could be included, or "What would happen if we polluted at the same rate?" Such scenarios would allow local users the ability to more accurately and realistically visualize potential situational impacts.

In *The Design of Everyday Things* (1998), Donald A. Norman identifies seven principles for transforming difficult tasks into simple ones. The fifth one is of particular relevance in this discussion moving forward: "Exploit the power of constraints, both natural and artificial." I would encourage all of us working with or interested in researching these types of visual risk communication tools to heed Norman's advice on the power of constraints in design, and think more about striking the right balance of agency between open exploration and scenarios. Ultimately, we must consider the question: Is providing influential stakeholders like coastal managers and city planners with enough slack to explore and present a range of data worth leaving lay public audiences vulnerable to committing errors in risk assessment?

DANIEL P. RICHARDS *is an assistant professor of English at Old Dominion University. His scholarly interests include visual risk communication, environmental rhetoric, and writing pedagogy.*

REFERENCES AND RECOMMENDED READING

Climate Central. 2017. *Surging Seas: Risk Finder. http://ss2.climatecentral.org.*

Herring, Jamie, Matthew S. VanDyke, R. Glenn Cummins, and Forrest Melton. 2017. "Communicating Local Climate Risks Online Through an Interactive Data Visualization." *Environmental Communication* 11.1: 90–105.

Kain, Donna, and Michelle Covi. 2013. "Visualizing Complexity and Uncertainty About Climate Change and Sea Level Rise." *Communication Design Quarterly* 1: 46–53.

Lipkus, Isaac, and Justin G. Hollands. 1999. "The Visual Communication of Risk." *Journal of the National Cancer Institute Monographs* 25: 149–163.

Mirel, Barbara. 1998. "Visualizations for Data Exploration and Analysis: A Critical Review of Usability Research." *Technical Communication* 45.4: 491–509.

_____. 2004. *Interaction Design for Complex Problem Solving: Developing Useful and Usable Software.* San Francisco, CA: Elsevier Science.

Montgomery, Lori. 2014. "In Norfolk, evidence of climate change is in the streets at high tide." *The Washington Post.* 31 May. *https://www.washingtonpost.com /business/economy/in-norfolk-evidence-of-climate-change-is-in-the-streets-at-high-tide/.*

NOAA. 2017. *Digital Coast. https://coast.noaa.gov/digitalcoast/tools/slr.*

Norman, Donald A. 1988. *The Design of Everyday Things.* New York, NY: Basic Books.

Rawlins, Jacob D., and Gregory D. Wilson. 2014. "Agency and Interactive Data Displays: Internet Graphics as Co-created Rhetorical Spaces. *Technical Communication Quarterly* 23.4: 303–322.

Richards, Daniel P. 2016. "Helping Local Residents Make Informed Decisions with Interactive Risk Visualization Tools." SIGDOC '16: The 34th ACM International Conference on the Design of Communication Proceedings. New York, NY: ACM.

Scannell, Leila, and Robert Gifford. 2011. "Personally Relevant Climate Change: The Role of Place Attachment and Local Versus Global Message Framing in Engagement." *Environment and Behavior* 45.1: 60–85.

Siegel, Alan, and Irene Etzkorn. 30 March 2013. "When Simplicity Is the Solution." *Wall Street Journal*, C1.

Stephens, Sonia H. 2015. "Interactive Data Visualization for Risk Assessment: Can There Be Too Much User Agency?" SIGDOC '15: The 33rd ACM International Conference on the Design of Communication Proceedings. New York, NY: ACM.

Stephens, Sonia H., Denise E. DeLorme, and Scott C. Hagen. 2014. "An Analysis of the Narrative-Building Features of Interactive Sea Level Rise Viewers." *Science Communication* 36.6: 675–705.

_____. 2015. "Evaluating the Utility and Communicative Effectiveness of an Interactive Sea-Level Rise Viewer Through Stakeholder Engagement." *Journal of Business and Technical Communication* 29.3: 1–30.

_____. 2017. "Evaluation of the Design Features of Interactive Sea Level Rise Viewers for Risk Communication." *Environmental Communication* 11.2: 248–262.

Mark Your Calendar

Organization Events Across the Globe

F.Y.I. lists information about nonprofit ventures only. Please send information to *intercom@stc.org.*

1 18-21 May
The **Association of Independent Information Professionals** (AIIP) will hold its 2017 Annual Conference, with a theme of "Resilience, Reinvention, Renewal: Pivoting for Success" at the Hampton Inn Convention Center in New Orleans, LA.
AIIP
http://www.aiip.org/Conference/
(225) 408-4400

2 12-15 June
The **Association of Proposal Management Professionals** (APMP) will hold its 2017 Annual Bid and Proposal Con 12-15 June at the New Orleans Marriott in New Orleans, LA.
APMP
http://www.apmp.org/events
membership@apmp.org

3 15-17 June
The **American Society for Indexing**'s 2017 Annual ASI – Beacon by the Bay Conference will be held at the Holiday Inn by the Bay Hotel and Convention Center in Portland, ME.
ASI
https://www.asindexing.org/conference-2017/
(480) 245-6750

4 23-26 July
The **IEEE International Communication Society** will hold its annual conference, ProComm 2017, 23-26 July at the University of Wisconsin-Madison with a conference theme of "Making Waves."
IEEE PCS
http://sites.ieee.org/pcs/procomm2017/
Erin.Friess@unt.edu

5 8-10 October
The **Public Relations Society of America** will hold its 2017 International Conference 8-10 October at the Boston Marriott Copley Place in Boston, MA.
PRSA
(212) 460-1400

* STC-related event

Caught Sketching

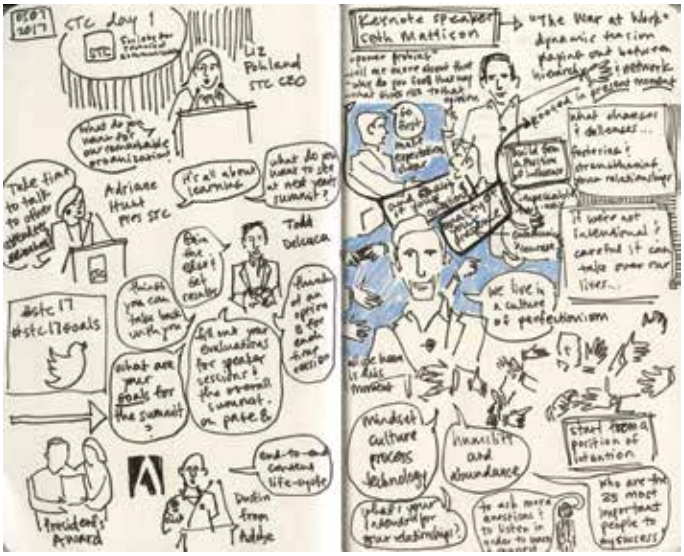
BY ELIZABETH ALLEY | *STC Senior Member*

I ATTENDED THE STC Technical Communication Summit in Washington, DC, my fourth conference over the seven years I've worked in technical communication. I knew I would be taking in a lot of information over a few days, and I knew that I'd be sketching, so I bought an unlined Moleskine Cahier journal for note-taking.

Sketching is just my normal mode of being. I always carry a sketchbook with me, as well as my favorite pens. And colored pencils. And watercolors.

I have kept a sketchbook since high school, but started carrying a sketchbook regularly in the late 1990s and obsessively around 2006. One of my high school art teachers told me that if I wanted to get better at art, I should draw from life, so I sketched trees around my school, furniture in my home (with typical teen-aged commentary on my mother's taste in furniture), and self-portraits. I still focus on these everyday things, but I've evolved from a tentative, semi-secret sketcher to someone who will sketch people at a conference and then show the world via social media.

I love how sketching improves the hand-eye-brain connection, improving my artwork overall by helping me to make design decisions more instinctively. It also helps me remember more about where I am and what I'm doing than I would otherwise. Sketching a scene helps recall the feeling of it as well as its appearance.



Sketching the 2017 Summit

Sharing sketches with the world adds another dimension to the practice of sketching. On-location sketching has become a global phenomenon, with groups like Urban Sketchers helping people learn about sketching and share sketches on social media platforms such as Facebook, Instagram, and Flickr. From these shared sketches it is easy to see that anyone can sketch; all you need is a pencil or pen, some paper, and a willingness to slow down and pay attention to what is in front of you.

What I focus on when sketching depends on the day. A normal work day might find me sketching my coffee cup or the many trees in my hometown of Memphis. When I travel, I might have the opportunity to sketch a landmark like the Leaning Tower of Pisa, Barcelona's Sagrada Família, or a Whataburger in Pensacola—whatever is there, I'll sketch it.

When I attend any kind of talk or panel (or sometimes a party or a wedding), I sketch the people involved. Sketching helps me to pay attention, and I retain information much better than if I don't sketch. Studies have shown that sketching improves memory, so the benefits of combining sketching with note-taking are backed up by science!

For the Summit, I knew to expect an intense schedule and I wanted to make sure I paid attention, so I began sketching people during the opening session, starting with STC CEO Liz Pohland, and capturing 16 different hand gestures by keynote speaker Seth Mattison. The interesting content drove me to take better notes, and the analytical and creative sides of my brain came together to make my notes into more of a story.

It was the storytelling aspect that kept me going through the Summit and tied together sketching and note-taking with technical communication. Sometime during the first day, maybe between Rahul Prabhakar's session on social media and Leah Guren's session on Super Success Hacks, I realized that, as a technical communicator and as an artist, everything I do is communication. At work, I help my colleagues by providing them with information to do their jobs better, and my artwork tells stories about people and places. Thanks to this realization, I have all of this good information from the Summit, and I'm more encouraged than ever to keep telling stories through my artwork.

See more of Elizabeth's Summit sketches online on STC's Notebook blog, *https://www.stc.org/notebook/*.

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STC Live Educational Webinar (free, sponsored, and community webinars excluded)	2
STC Online Courses	6
STC Summit Pre-Conference Courses (full day)	6
STC Summit Pre-Conference Courses (half day)	3
STC Annual Summit	8
Begin and complete a college-accredited course related to the Technical Communication field	8
Published articles that relate to any aspect of *Technical Communication* (2/article)	2
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